Name: Oyigbenu Meshack Eshikowuso

Department: Computer science

Matric number: 18/ENG02/084

Course title: CSC202

Date: 2nd April 2020

Computer keyboard

A **computer keyboard** is type writer styled device which uses an arrangement of buttons or keys to act as mechanical levers or electronic switches. Keyboard keys (buttons) typically have characters engraved or printed on them, and each press of a key typically corresponds to a single written symbol. However, producing some symbols may require pressing and holding several keys simultaneously or in sequence. While most keyboard keys produce letters, numbers or signs (characters), other keys or simultaneous key presses can produce actions or execute computer commands.

**Types of computer keyboards**

There are different types of keyboards available right now and each of them is designed with a focus on specific features that suit special needs.

**Factors determining the size of a keyboard**

1. The presence of duplicate keys, such as a separate numeric keyboard or two each of Shift, ALT and CTL for convenience.
2. The extent to which a system is used where a single action is produced by a combination of subsequent or simultaneous keystrokes (with modifier keys), or multiple pressing of a single key. A keyboard with few keys is called a keypad.
3. Another factor determining the size of a keyboard is the size and spacing of the keys. The reduction is limited by the practical consideration that the keys must be large enough to be easily pressed by fingers. Alternatively, a tool is used for pressing small keys.

**MECHANICAL KEYBOARD:**

For nerds mechanical keyboards are holy Grails of computer input devices. The consist of individual key switches that are much more tactile and responsive to key presses. Apart from enabling you to type faster, mechanical keyboards also last a lot longer than regular keyboards. A conventional keyboard can usually withstand only 10million key presses before ending up in the crash while mechanical keyboards can usually last more than 5 times that many.

**GAMING KEYBOARDS:**

For any one serious about improving their gameplay experience and number of victories, a gaming keyboard is a must. Good gaming keyboard consist of unique features that give you an edge and gaming first. They support and key rollover which registers multiple key presses even when they are presses simultaneously. This makes keyboard much more responsive they also usually come with programmable backlit keys plus a slew of macro functions turning your keyboard into a smart command center.

**FLEXIBLE KEYBOARDS:**

Flexible keyboards are a junction between normal type and laptop type keyboards: normal from the full arrangement of keys, and laptop from the short key distance. Additionally, the flexibility allows the user to fold/roll the keyboard for better storage and transfer. However, for typing the keyboard must be resting on a hard surface. The vast majority of flexible keyboards in the market are made from silicone; this material makes them water- and dust-proof. This is useful in hospitals, where keyboards are subjected to frequent washing, and other dirty or must-be-clean environments.

**LAPTOP SIZE KEYBOARD:**

Keyboards on laptops and notebook computers usually have a shorter travel distance for the keystroke, shorter over travel distance, and a reduced set of keys. They may not have a numeric keypad, and the function keys may be placed in locations that differ from their placement on a standard, full-sized keyboard. The switch mechanism for a laptop keyboard is more likely to be a scissor switch than a rubber dome; this is opposite the trend for full-size keyboards.

**STANDARD KEYBOARD:**

Standard alphanumeric keyboards have keys that are on three-quarter inch centers (0.750 inches, 19.05 mm), and have a key travel of at least 0.150 inches (3.81 mm). Desktop computer keyboards, such as the 101-key US traditional keyboards or the 104-key Windows keyboards, include alphabetic characters, punctuation symbols, numbers and a variety of function keys. The internationally common 102/104 key keyboards have a smaller left shift key and an additional key with some more symbols between that and the letter to its right (usually Z or Y). Also the enter key is usually shaped differently. Computer keyboards are similar to electric-typewriter keyboards but contain additional keys, such as the command or Windows keys. There is no standard computer keyboard, although many manufacturers imitate the keyboard of PCs. There are actually three different PC keyboards: the original PC keyboard with 84 keys, the AT keyboard also with 84 keys and the enhanced keyboard with 101 keys. The three differ somewhat in the placement of function keys, the control keys, the return key, and the shift key.

**DIFFERENCE BETWEEN TYPES OF KEYBOARDS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Standard keyboards** | **Gaming keyboards** | **Laptop size**  **Keyboards** | **Flexible keyboards** | **Mechanical keyboards** |
| 1.They are designed to minimize strain on the body | 1.They have key Rollovers(this is the component that determines the number of key presses that a keyboard can register) | 1.They are not dust proof therefore require constant cleaning. | 1.Water and dust resistance, does not require constant cleaning. | 1.They are expensive and require a bit of explanation to understand how they work |
| 2.Keyboards are poorly designed not only slow your typing, but can lead to RSI (repetitive strain injuries) overtime, such as carpal tunnel syndrome. | 2.They have macro functions. | 2.They come attached to the laptop therefore contain additional features e.g enable volume control | 2. It is portable therefore can be rolled up and stuffed into a bag | 2.Membrane is designed to resist depression, which is what causes the keys to resume their original position after a user withdraws his finger from the key. |
| 3. They are considered comfortable | 3.They are comfortable and durable | 3. They are comfortable but not durable | 3. It is resilient to outdoorsy situation | 3.They also stimulate a quicker return to keys’ original positions |
| 4. They are less expensive | 4.They are very expensive | 4. They are very expensive to replace after spoilt | 4.This keyboard produces such little noise that can barely be detected. | 4.They are durable |
| 5. They are durable | 5.They have programmable backlit keys and are very expensive | 5. They are not resilient. | 5. They are very cheap | 5.They are also on the higher side of the price spectrum |